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ABSTRACT

The multi-stage development of the Community Service Attitudes Scale (CSAS), an instrument for measuring college students' attitudes about community service, is reported. The CSAS was developed based on the helping behavior model of S. Schwartz (1977). The developed instrument was tested with two samples of 437 and 332 college students. The scales of the CSAS show strong reliability evidence (coefficient alphas ranging from 0.72 to 0.93). Principal components analysis results are consistent with the Schwartz model. In addition, construct validity evidence also supports the model. The CSAS scales are positively correlated with gender, college major, community service experience, and intentions to engage in community service. The CSAS will be useful to researchers for conducting further research on the effects of service-learning and community service experiences for students. (Contains 7 tables and 25 references.) (SLD)

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Refinement of a Community Service Attitude Scale

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Abstract

This study reports the multi-stage development of the Community Service Attitudes Scale (CSAS), an instrument for measuring college students' attitudes about community service. The CSAS was developed based on Schwartz's (1977) helping behavior model. The scales of the CSAS show strong reliability evidence (coefficient alphas ranging from .72 to .93). Principal components analysis results are consistent with the Schwartz model. In addition, construct validity evidence also supports the model. The CSAS scales are positively correlated with gender, college major, community service experience, and intentions to engage in community service. The CSAS will be useful to researchers for conducting further research on the effects of service-learning and community service experiences for students.

The Community Service Attitudes Scale: Development and Construct Validity

Increasingly, community service is being incorporated into the university setting through the integration of service-learning in college classrooms (Zlotkowski, 1996). Service-learning is an experiential pedagogy requiring students to apply course theory by working on a project for a local, non-profit, community organization. Educators, researchers, and policymakers believe that community service provides valuable experiences for students. In the form of service-learning, community service offers the opportunity for students to develop a variety of skills, including team building, leadership, conflict resolution, interpersonal, communication, organization, and time management (Tucker, McCarthy, Hoxmeier, & Lenk, 1998). Further, it prepares students for adulthood and citizenship by sensitizing them to community needs and showing them how their time and talents can make a difference in their community (Smith, 1994). Finally, community service is frequently an important part of the mission of a university, and one of the values it endeavors to instill in its students (Cohen, 1994; Markus, Howard, & King, 1993).

While community service learning holds great promise for higher education classrooms, it has generally been recognized that research into the outcomes and effects of service-learning is lacking (Eyler, Giles, & Braxton, 1997; Giles, Honnet, & Migliore, 1991). For such research to occur, attitude instruments need to be developed that accurately measure student attitudes about community service and predict student intentions to engage in community service.

This study reports the multi-stage development of the Community Service Attitudes Scale (CSAS), an instrument to measure college students' attitudes about community service. The development of community service attitude instruments is essential in order to conduct research, evaluate interventions, and predict outcomes of community service participation. The instrument for this research was based on Schwartz's (1977; Schwartz & Howard, 1982, 1984) model of altruistic helping behavior.

Altruistic helping behavior describes how aware individuals are of the needs of others and to what degree they want to help others. The model is comprised of cognitive and affective steps through which a person progresses, beginning with the perception of the existence of a need

and ending with an overt response of help. In the development of this model, Schwartz (1977) described helping primarily in terms of helping in a one-time, specific situation, such as watching a stranger's parcel in a restaurant or donating blood. For the purposes of this study, the model is recast in more general terms to apply to volunteerism, which usually is directed at helping others in a more general, often ongoing basis. The model identifies the following sequential steps:

Phase I. Activation Steps: Perception of a need to respond.

1. Awareness that others are in need.
2. Perception that there are actions which could relieve the need.
3. Recognition of one's own ability to do something to provide help.
4. Feeling a sense of responsibility to become involved based on a sense of connectedness with the community or the people in need.

Phase II. Obligation Step: Moral obligation to respond.

5. Feeling a moral obligation to help generated through (a) personal or situational norms to help and (b) empathy.

Phase III. Defense Steps: Reassessment of potential responses.

6. Assessment of (a) costs and (b) probable outcomes (benefits) of helping.
7. Reassessment and redefinition of the situation by denial of the reality and seriousness of the need and the responsibility to respond.

Phase IV. Response Step: Engage in helping behavior.

8. Intention to engage in community service or not.

Each phase influences the next, such that if steps 1 through 4 of Phase I have all been activated, the individual progresses to Phase II. Phase II then leads to Phase III. Finally, in Phase IV, the decision whether or not to help (e.g., to engage in community service) is made.

This paper reports the multi-stage development of an instrument to measure attitudes at each step of the model. First, survey items were constructed for each step of the model and analyzed for reliability. Then, the survey items were revised, administered to a different group of

college students, and analyzed for reliability. A principal components analysis was conducted to determine if the resulting factors were consistent with the Schwartz model. Finally, construct validity evidence was analyzed. A final version of the Community Service Attitudes Scale is offered for future research.

Participants

The participants were college students enrolled in business, communication, education, and psychology classes at a Western university in the Spring of 1997 (n=437) and Fall of 1998 (n=332). The demographic profiles of both samples are presented in Table 1. In both samples, 21 was the modal age of the students. Approximately 90 percent of participants were White, while the remaining 10 percent were Hispanic, Asian, African-American, Native American, and Multi-racial. Most of the students were in their junior or senior year of college, and did have previous community service experience. In the first sample, slightly over half of the participants were male (56 percent), and the majority were business majors (77 percent). The second sample was slightly different: 59 percent were female, 30 percent were business majors, and 23 percent were psychology majors.

Scale Development

Community service attitude questions assessing each step of the Schwartz model were developed, resulting in separate scales that correspond to each step of the model. The first survey contained 70 items: 59 questions on community service attitudes, 6 demographic questions, and 5 questions on intentions to participate in community service projects or to enroll in service-learning classes. For the second survey, items from the first survey were revised, resulting in 31 community service attitude items, 7 demographic questions, and 3 questions on intentions to participate in community service. Intention items were written as outcome measures, as is often done when actual behaviors are not measured, because intentions have been shown to strongly predict future behavior (Ajzen, 1988). The response choices for all items were Likert-type scales.

First, we performed reliability analyses on the scales of the first survey. Each step of the model was analyzed as a separate scale. Items were analyzed to determine their fit with the other items on each scale. Items with item-total correlations less than .30 were dropped in order to increase the homogeneity of each scale. This is consistent with the procedure recommended by Nunnally and Bernstein (1994) for construct validation research. Original survey items and coefficient alphas are presented in Table 2.

Table 2 also presents the item statistics for the revised version of each scale of the first survey. Reported for each scale are the mean and standard deviation of each item, and item-scale correlations. In addition, the means, standard deviations, and coefficient alphas are reported for the revised scales. Alphas indicate item homogeneity for each scale. Alpha levels above .70 indicate modest reliability, which is acceptable for early stages of research. Alpha levels above .80 are considered good (Nunnally & Bernstein, 1994). Five of the helping scales (connectedness, norms, empathy, costs, and benefits) show alpha levels at or above .80, and the remaining four (awareness, actions, ability, and seriousness) range from .54 to .67. These scales have only two to five items per scale, which contributed to the lower alphas. The five scales with alphas above .80 had 6 to 10 items each. The two scales that measure intentions to participate in community service and to engage in service-learning activities have alphas of .75 and .73, respectively.

Next, we used these results to refine the items for the second survey. Several scales were rewritten to make their content more in keeping with the Schwartz model or to lengthen them, thereby increasing their reliability. In addition, the items on the first survey about children or schools were rewritten to reflect attitudes about community service in general. Finally, some items were rewritten to change their negative tone.

Table 3 presents the second survey items, coefficient alpha for each scale, item means and standard deviations, and item-scale correlations as well as scale means and standard deviations. These scales are much stronger than the scales on the first survey. The item-scale

correlations are all greater than .50 and coefficient alphas range from .78 to .90. There was no need to revise the scales on the second survey, since they all showed high levels of homogeneity.

Analyses and Results

Principal Components Analysis

Principal components analysis was conducted on the second survey in order to assess whether linear combinations of the community service attitude items conform to the Schwartz model. Although principal components analysis is an exploratory technique, if its results correspond in a meaningful way to the Schwartz model, then it lends support to the theory and our measures. The principal components analysis with varimax rotation resulted in eight factors with eigenvalues above one and communalities ranging from .54 to .79 (average = .68). The eight factors account for 65 percent of the variance. According to Stevens (1996), if N is greater than 250 and the communalities average greater than .65, then retaining all factors with eigenvalues greater than one is accurate.

Items were assigned to the factor on which the pattern coefficient was largest. All pattern coefficients were greater than .40. Table 4 shows the rotated factor pattern matrix as well as the original item/scale match for the Schwartz model. Factor 1 consists of items from the actions, ability, and norms scales. Factor 2 is primarily made up of items from the connectedness scale. Factors 3 and 4 are made up of items from the costs scale and the awareness and empathy scales, respectively. The outcome measures—intentions to engage in community service and desire to participate in service-learning—form Factor 5. Factor 7 is created by items from the seriousness scale. Items from the benefits scale load on Factors 6 and 8. The two career benefits fit onto Factor 8, while the remaining four benefits fit onto Factor 6. We assigned five items that had approximately equal pattern coefficients on two different factors to the factor that had the most items from the original Schwartz model. Overall, the factors approximate simple structure, match very nicely to the theoretical model, and are highly interpretable.

Reliability Analysis

The eight factors were analyzed for internal consistency. Coefficient alphas, scale means and standard deviations, and correlations of the factor scales are presented in Table 5. Alpha reliabilities range from .84 to .93 for all the factors, except for the two benefits factors. The alpha reliability for Factor 6 is .79 and .72 for Factor 8.

Based upon the theoretical interpretability of the eight principal components and their strong internal consistencies, validity analyses are conducted on the eight scales derived from the principal components analysis. This is done to assess how well the scales are measuring the intended constructs.

Validity Analysis

One way to assess the construct validity of these scales is to analyze the relationships between each scale and other measures that we might expect to be related to them. For this study, we expect that the scales will not be correlated with age, race, college rank, and gender. In terms of a relationship between the scales and gender, previous research is not conclusive on whether such a relationship exits. Some studies report that women participate in community service more than men do ("Americans Volunteer," 1985; Fitch, 1987; Hayghe, 1991; Wandersman, Florin, Friedmann & Meier, 1987). Other studies (Allen, 1982; Booth, 1972; Verba & Nie, 1972) found no difference between men and women in community service involvement. Given no clear empirical guidance and a lack of theoretical reasoning, we expect that the scales will not be related to gender.

We do expect that the helping behavior scales will be correlated with previous community service experience and amount of previous community service involvement. We also expect that students who major in the social sciences and other "helping" fields will score higher on the scales, since students often are drawn to these majors out of an interest in helping others. Finally, we expect that the seven helping scales will be related to the intention scale, which serves as an outcome measure.

Table 6 presents relationships of the eight scales to demographic variables, including age, race, college rank, gender, major, previous community service experience, and amount of

community service involvement. There is no substantial relationship of age, race, or rank to the scales. However, there is a difference for gender; female students show a consistent tendency to score higher on all of the scales.

Table 7 presents scale means and one-way anova results of scale by major. Consistent with our expectations, social work majors tended to score highest, followed by psychology majors, whereas business majors tended to score lowest. Major explained the largest amount of for the outcome factor (Factor 5): intentions to engage in community service and desire to participate in a service-learning activity.

Additionally, as predicted, previous community service experience and amount of previous community service involvement is positively related to scores on most of the scales. Table 5 shows the relationship of the Factor 5 scale—intentions to engage in community service, and desire to participate in a service-learning activity—to the other scales. All scales correlate positively (except costs, which is a negative scale) with intentions to engage in community service and desire to participate in a service-learning activity.

Discussion

The Community Service Attitudes Scale measures student attitudes toward community service participation. Results of the principal components analysis are consistent with Schwartz' theory of helping behavior (1977; Schwartz & Howard, 1982, 1984), but suggest that there are probably fewer distinct aspects to helping than the Schwartz model proposes. The analysis resulted in eight principal components instead of the ten original scales that were based on the Schwartz model. The first principal component combines three of the original Schwartz scales and consists of normative attitudes that people can and should help in the community. The second factor consists of beliefs that one is part of one's community and should help out. The third factor describes costs of helping; the fourth assesses awareness of needs in the community (combining two of the original scales); and the fifth captures a personal desire to participate in community service (and service-learning). The sixth and eighth factors describe two types of benefits to the volunteer resulting from helping. Finally, the seventh factor consists of attitudes

about the seriousness of the needs of the community. The reliability analyses conducted on the eight scales show strong internal consistencies.

A weakness of research on community service to date is the lack of a well-defined construct of helping behavior, in general, or attitudes about community service, in particular. A thorough and comprehensive understanding of the antecedents, correlates, and consequences of community service is needed. Researchers have investigated a wide variety of motivators such as costs and benefits (Irvine, Biglan, Duncan & Metzler, 1996; Wandersman, et al., 1987), self-efficacy (Eden & Kinnar, 1991; Hofstetter, Sallis & Hovell, 1990), and other dispositional characteristics that are predictive of volunteering and helping (Clary & Orenstein, 1991; McClintock & Allison, 1989). The helping behavior model used in this study shows promise as a way to integrate these various perspectives into a comprehensive theory of volunteerism and community service.

The CSAS will help to provide a framework for further research in this area. The relationships of the seven helping attitude scales to other previous community service experience, college major, and intent to participate in community service show that the scales are tapping into an underlying construct that is impacting interest in performing community service. These results support the construct validity of the CSAS.

The relationships of the scales to gender, although interesting, do pose questions. There is currently not enough research in this area to understand why males and females score differently or what the differences mean for actual participation rates in community service. The implications of the gender difference could be important for planning service-learning projects or other service interventions.

Schwartz's (1977) model of helping behavior is a useful framework for understanding how people decide to become involved in community service. Attitude scales that measure helping constructs can be used by researchers in determining what types of interventions might increase participation in community service. The CSAS can help inform and increase researchers' and educators' understanding of students' attitudes toward community service

projects performed for college credit or as a course requirement. In addition, it may be utilized to evaluate interventions aimed at changing students' community service attitudes. University administrators and faculty, researchers, and policy makers will find the Community Service Attitudes Scale to be a useful tool for understanding students' attitudes towards community service.

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Table 1

Demographic Profiles of Surveys 1 & 2

Characteristic	Group	Percent [a] Survey 1	Survey 2
Age	18-20	26	24
	21	27	29
	22	17	15
	23-29	23	25
	30-39	4	4
	40 and above	3	2
Race	African-American	1	1
	Hispanic	4	5
	Native American	1	1
	Asian	3	3
	Multi-Racial	1	2
	White	90	87
	Other	1	1
Gender	Female	44	59
	Male	56	40
College Rank	Freshman	1	0
	Sophomore	17	6
	Junior	38	36
	Senior	42	52
	Graduate	2	5
Major	Business	77	30
	Non-Business	23	

	Speech Communication	--	11
	Recreation & Tourism	--	8
	Education	--	8
	Social Work	--	2
	Psychology	--	23
	Other	--	19
Previous C. S. Experience	Yes	84	81
	No	16	18
Previous C. S. Frequency	Once per year	--	40
	2-4 times per year	--	25
	Monthly	--	8
	Weekly	--	8
	Not applicable	--	19

Note. Survey 1 n=437, Survey 2 n=332. Dash indicates that these data were not collected for this sample. C. S. is community service.

[a] Percentages may not sum to 100 because of rounding

Table 2

Survey 1 Scale Items, Internal Consistency Reliabilities, Descriptive Statistics, and Item-Total Correlations

PHASE I: Perceptions

AWARENESS original scale alpha = .45 final scale alpha = .67	Item Mean	Item SD	Item-Scale Correlation
Our elementary education system needs good volunteers	2.03	0.87	.43
Why should I do this? Americans pay taxes to support community projects [a]	2.05	0.93	.56
Community service is something I usually don't think about [a]	2.94	1.08	.46
America may not be perfect, but the American way has brought us about as close as human beings can get to a perfect society [b]			
scale mean = 2.34, SD = .75			

ACTIONS original scale alpha = .24 final scale alpha = .59	Item Mean	Item SD	Item-Scale Correlation
I am starting to understand that volunteer work at local agencies will not solve most social problems [a]	2.99	0.86	.42
I am starting to realize that many volunteer organizations simply put "Band-Aids" over social problems, rather than change them [a]	2.91	0.93	.42
Community service helps people who cannot help themselves [b]			
scale mean = 2.96, SD = .75			

ABILITY original scale alpha = .43 final scale alpha = .54	Item Mean	Item SD	Item-Scale Correlation
I am good at helping people	1.80	0.71	.34
I would like to volunteer for community service, but I do not know where to go to find out about such activities [b]			
I would volunteer for community service, but I do not feel that I have any skills to contribute that would be useful [a]	1.81	0.88	.21
When I am working at a job, I expect to be able to do well at it	1.60	0.75	.33
If I had a job which involved many different tasks, some easy and some difficult, I would probably do very well at almost all of them	1.79	0.77	.34
My engaging in community service on a monthly basis is (Under my control) (Dependent on other people/events) [b]			
My engaging in community service on a monthly basis is (Up to me) (Not up to me) [b]			
My engaging in community service activities makes me feel (Confident) (Terrified)	1.81	0.77	.30
scale mean = 1.76, SD = .46			

CONNECTEDNESS original scale alpha = .83 final scale alpha = .83	Item Mean	Item SD	Item-Scale Correlation
It is the responsibility of all people in the community to participate actively in the education of school children	2.10	0.90	.44

It is important to help people in general, whether you know them personally or not	1.81	0.73	.39
I believe that community service is important	1.70	0.65	.59
I should provide special help to others who are in need	2.18	0.79	.59
I am the one who is responsible for doing something about improving local community situations	2.53	0.84	.50
We owe it to the community to help out whenever we can	2.20	0.76	.66
It's my responsibility to take some real measures to help the community	2.47	0.81	.66
When I think about engaging in community service, I think it will be (Good) (Bad)	1.74	0.73	.50
When I think about engaging in community service, I think it will be (Beneficial) (Harmful)	1.62	0.71	.45

scale mean = 2.04, SD = .50

PHASE II: Moral obligation

NORMS original scale alpha = .79 final scale alpha = .80	Item Mean	Item SD	Item-Scale Correlation
It never occurred to me to volunteer for community service [b]			
It is my duty as a citizen to help the community	2.18	0.89	.41
We owe it to the community to help out whenever we can	2.20	0.76	.49
When I think about engaging in community service, I think it will be (Wise) (Senseless)	1.89	0.75	.61
When I think about engaging in community service, I think it will be (Correct) (Incorrect)	1.78	0.72	.60
When I think about engaging in community service, I think it will be (Good) (Bad)	1.74	0.73	.65
When I think about engaging in community service, I think it will be (Moral) (Immoral)	1.64	0.74	.68

scale mean = 1.90, SD = .55

EMPATHY	original scale alpha = .85	final scale alpha = .85	Item Mean	Item SD	Item-Scale Correlation
When I meet people who are very sad, I wonder how I would feel if I were in their shoes			2.20	0.95	.73
When I see vulnerable people, I often wonder how I would feel if I were them			2.29	0.98	.73
When I see an abused child, I try to imagine how he/she feels about things			2.07	0.86	.59
I probably try more than most people to understand the feelings of others			2.25	0.98	.59
I feel bad that some community members are suffering from a lack of resources			2.14	0.79	.61
I feel bad about the disparity among community members			2.27	0.85	.65
I'm sorry about my community's current situation			2.99	0.97	.40

scale mean = 2.32, SD = .66

PHASE III: Reassessment

COSTS	original scale alpha = .81	final scale alpha = .83	Item Mean	Item SD	Item-Scale Correlation
It is hard to find the time to work on other people's problems			2.47	0.98	.46
Time put in at work does not allow for time to devote to community service projects			2.84	1.02	.61
Time devoted to family activities does not allow for time to devote to community service activities			3.05	0.96	.65
Family and work time constraints prevent me from devoting time to community service activities			2.73	1.05	.68
I would volunteer for community service, but I don't have time			2.74	1.08	.66
The amount of my time that is required is a major cost of community service			2.63	1.05	.47

Feeling of frustration from lack of making progress is a major cost of community service [b]			
Needing to give up personal and family matters is a major cost of community service	2.71	1.00	.50
Scheduling the activities with the community organization is a major cost of community service [b]			
My engaging in community service on a monthly basis is (Easy) (Difficult) [a]	2.75	1.24	.46

scale mean = 2.74, SD = .70

BENEFITS original scale alpha = .90 final scale alpha = .91	Item Mean	Item SD	Item-Scale Correlation
I would receive no benefit from doing community service a [b]			
My engaging in community service activities makes me feel (Proud) (Embarrassed)	1.64	0.70	.72
My engaging in community service activities makes me feel (Pleased) (Displeased)	1.61	0.70	.79
My engaging in community service activities makes me feel (Delighted) (Disgusted)	1.86	0.80	.74
When I think about engaging in community service, I think it will be (Enjoyable) (Unenjoyable)	2.12	0.89	.62
When I think about engaging in community service, I think it will be (Pleasant) (Unpleasant)	2.15	0.87	.68
When I think about engaging in community service, I think it will be (Good) (Bad)	1.74	0.73	.71
When I think about engaging in community service, I think it will be (Beneficial) (Harmful)	1.62	0.71	.67
When I think about engaging in community service, I think it will be (Moral) (Immoral)	1.64	0.74	.70

scale mean = 1.80, SD = .59

SERIOUSNESS original scale alpha = .61 final scale alpha = .61	Item Mean	Item SD	Item-Scale Correlation

Lack of participation in community service will cause severe damage to our society	2.49	0.98	.44
Without community service, today's disadvantaged citizens have no hope	2.95	1.07	.44

scale mean = 2.74, SD = .88

PHASE IV: Helping

INTENTION TO ENGAGE IN COMMUNITY SERVICE LEARNING alpha = .73	Item Mean	Item SD	Item-Scale Correlation
I will seek out courses with a service learning component	3.20	.95	.58
Would you seek out a class with a community service learning component (Very Likely) (Very Unlikely)	3.12	1.17	.58

scale mean = 3.16, SD = .94

INTENTION TO ENGAGE IN COMMUNITY SERVICE alpha = .75	Item Mean	Item SD	Item-Scale Correlation
I will seek out opportunities to engage in community service after I graduate	2.45	.90	.62
I will participate in community service programs while I am in school	2.59	.97	.56
Would you seek out an opportunity to perform community service (Very Likely) (Very Unlikely)	2.67	1.14	.56

scale mean = 2.57, SD = .82

Note. Item responses were on a 5-point Likert-type scale: 1 = strongly agree, 5 = strongly disagree

[a] Items which were reverse-scored

[b] Items which were dropped for the final scales

Table 3

Survey 2 Scale Items, Internal Consistency Reliabilities, Descriptive Statistics, and Item-Total Correlations

PHASE I: Perceptions

AWARENESS [a] alpha= .78	Item Mean	Item SD	Item-Scale Correlation
Community groups need our help	6.02	0.95	.53
There are people in the community who need help	6.44	0.72	.64
There are needs in the community	6.28	0.81	.64
There are people who have needs which are not being met	6.12	0.90	.56
scale mean = 6.21, SD = .66			

ACTIONS [a] alpha= .83	Item Mean	Item SD	Item-Scale Correlation
Volunteer work at community agencies helps solve social problems	5.06	1.24	.63
Volunteers in community agencies make a difference, if only a small difference	5.92	1.05	.63
College student volunteers can help improve the local community	5.90	0.98	.70
Volunteering in community projects can greatly enhance the community's resources	5.60	1.07	.70
The more people who help, the better things will get	5.59	1.12	.52
scale mean = 5.61, SD = .85			

	Item	Item	Item-Scale

ABILITY [a] alpha= .82	Mean	SD	Correlation
Contributing my skills will make the community a better place	5.46	1.04	.67
My contribution to the community will make a real difference	5.13	1.21	.70
I can make a difference in the community	5.67	1.16	.67

scale mean = 5.42, SD = .98

CONNECTEDNESS [a] alpha= .90	Item Mean	Item SD	Item-Scale Correlation
I am responsible for doing something about improving the community	5.32	1.29	.74
It's my responsibility to take some real measures to help others in need	5.12	1.43	.74
It is important to me to have a sense of contribution and helpfulness through participating in community service	5.13	1.42	.77
It is important to me to gain an increased sense of responsibility from participating in community service	4.83	1.43	.73
I feel an obligation to contribute to the community	4.70	1.45	.74
Other people deserve my help	5.04	1.51	.68

scale mean = 5.02, SD = 1.16

PHASE II: Moral Obligation

NORMS [a] alpha= .84	Item Mean	Item SD	Item-Scale Correlation

It is important to help people in general	6.28	0.82	.60
Improving communities is important to maintaining a quality society	6.18	0.99	.68
Our community needs good volunteers	6.08	1.00	.67
All communities need good volunteers	6.14	1.02	.68
It is important to provide a useful service to the community through community service	5.46	1.20	.59

scale mean = 6.03, SD = .79

EMPATHY [a] alpha= .83	Item Mean	Item SD	Item-Scale Correlation
When I meet people who are having a difficult time, I wonder how I would feel if I were in their shoes	5.74	1.33	.58
I feel bad that some community members are suffering from a lack of resources	5.63	1.25	.75
I feel bad about the disparity among community members	5.46	1.31	.77

scale mean = 5.61, SD = 1.12

PHASE III: Reassessment

COSTS [b] alpha= .85	Item Mean	Item SD	Item-Scale Correlation
I would have less time for my schoolwork	5.04	1.53	.65
I would have forgone the opportunity to make money in a paid position	4.36	1.81	.59

I would have less energy	3.62	1.65	.61
I would have less time to work	4.59	1.74	.77
I would have less free time	5.10	1.57	.69
I would have less time to spend with my family	4.05	1.86	.54

scale mean = 4.46, SD = 1.29

BENEFITS [b] alpha= .80	Item Mean	Item SD	Item-Scale Correlation
I would be contributing to the betterment of the community	5.89	1.03	.55
I would experience personal satisfaction knowing that I am helping others	6.24	0.94	.52
I would be meeting other people who enjoy community service	5.70	1.08	.54
I would be developing new skills	5.44	1.23	.71
I would make valuable contacts for my professional career	5.08	1.42	.54
I would gain valuable experience for my resume	5.70	1.22	.51

scale mean = 5.67, SD = .82

SERIOUSNESS [a] alpha= .86	Item Mean	Item SD	Item-Scale Correlation
Lack of participation in community service will cause severe damage to our society	4.56	1.53	.69
Without community service, today's disadvantaged citizens have no hope	3.76	1.62	.56
Community service is necessary to making our communities better	5.39	1.21	.74

It is critical that citizens become involved in helping their communities	5.25	1.18	.77
Community service is a crucial component of the solution to community problems	5.12	1.22	.73

scale mean = 4.82, SD = 1.10

PHASE IV: Helping

INTENTION TO ENGAGE IN COMMUNITY SERVICE [a]	Item Mean	Item SD	
I want to do this (service-learning) activity	5.27	1.39	
INTENTION TO ENGAGE IN COMMUNITY SERVICE [a] alpha= .89	Item Mean	Item SD	Item-Scale Correlation
I will participate in a community service project in the next year	4.95	1.77	.80
Would you seek out an opportunity to do community service in the next year	4.95	1.73	.80

scale mean = 4.95, SD = 1.66

[a] Item responses were on a 7-point Likert-type scale: 1 = strongly disagree, 7 = strongly agree

[b] Item responses were on a 7-point Likert-type scale: 1 = extremely unlikely, 7 = extremely likely

35

Table 4

Rotated Factor Pattern Matrix

Item	Schwartz Scale	NOR	CON	COS	AWA	INT	BEN	SER	CAR
Help people	Norms	**.43**	.48	-.01	.32	.13	.13	-.13	.10
Maintaining a quality society	Norms	**.53**	.37	-.04	.23	.10	.31	.10	.06
Make a difference in community	Ability	**.72**	.17	-.02	.13	.11	.15	.13	.06
We need good volunteers	Norms	**.63**	.22	-.08	.33	.06	.09	.02	.20
All need good volunteers	Norms	**.55**	.30	-.07	.36	.07	.15	.07	.07
Helps solve social problems	Actions	**.52**	.18	-.04	.11	.19	.19	.31	.01
Makes a difference	Actions	**.52**	.17	-.10	.27	.19	.40	.09	.05
College students can help	Actions	**.75**	.20	-.06	.11	.11	.21	.13	.00
Enhance the community's resources	Actions	**.71**	.29	-.03	.06	.07	.16	.17	.16
My skills will make community better	Ability	**.63**	.25	-.03	.21	.21	.03	.21	.07
My contribution will make a difference	Ability	**.56**	.29	-.07	.15	.34	.04	.34	.08
I am responsible for doing something	Connected	.44	**.68**	-.04	.10	.18	.07	.01	.05
Real measures to help others in need	Connected	.29	**.74**	-.11	.17	.08	.10	.11	.07
It is important to provide service	Norms	.41	**.60**	-.10	.09	.15	.13	.26	.17
Sense of contribution and helpfulness	Connected	.29	**.66**	-.09	.06	.38	.14	.14	.16

Gain increased sense of responsibility	Connected	.21	**.67**	-.09	.06	.27	.06	.21	.18
Obligation to contribute to community	Connected	.23	**.68**	-.04	.20	.24	.11	.26	-.04
Others deserve my help	Connected	.21	**.65**	-.06	.20	.06	.04	.30	.12
It is critical to be involved	Serious	.35	**.61**	-.01	.16	.18	.11	.39	.08
Less time for schoolwork	Costs	.07	-.07	**.77**	-.04	-.08	.07	.00	-.07
Forgone opportunity to earn money	Costs	-.06	-.04	**.70**	-.12	-.14	-.02	-.07	.04
Have less energy	Costs	-.10	-.07	**.72**	-.09	-.01	-.15	-.06	.07
Less time to work	Costs	-.11	-.03	**.86**	.06	-.09	-.01	-.00	-.03
Less free time	Costs	-.03	-.17	**.79**	.15	-.02	-.01	.04	-.12
Less time to spend with family	Costs	-.03	.07	**.68**	.01	-.04	-.06	.06	-.11
Community groups need our help	Aware	.48	.24	-.07	**.43**	.16	.29	.10	.07
People in the community need help	Aware	.42	.07	-.05	**.68**	.08	.09	.06	.03
How I would feel in their shoes	Empathy	.01	.50	-.10	**.45**	-.03	.18	.18	.02
Feel bad some are suffering	Empathy	.05	.41	-.04	**.65**	.05	.25	.24	-.02
Feel bad about disparity	Empathy	.09	.50	.02	**.59**	.02	.25	.24	-.04
There are needs in the community	Aware	.39	.08	.09	**.66**	.12	-.08	.01	.10
People have needs not being met	Aware	.27	.14	.00	**.64**	.10	.07	.07	.14
I want to do this activity	Intentions	.26	.19	-.20	.10	**.64**	.19	.11	.13
I will participate in community service	Intentions	.19	.26	-.14	.08	**.81**	.04	.04	-.01

Seek out c.s. opportunity	Intentions	.22	.28	-.15	.13	**.81**	.17	.07	.09
Contributing to community	Benefits	.30	.01	-.04	.18	.17	**.67**	.21	.11
Experience personal satisfaction	Benefits	.18	.13	-.13	.27	.21	**.62**	.10	.09
Meeting others	Benefits	.20	.18	-.00	.00	.02	**.78**	.01	.11
Developing new skills	Benefits	.25	.26	-.02	-.01	-.00	**.58**	.10	.52
Lack of c.s. will cause severe damage	Serious	.26	.36	.05	.16	.26	.08	**.60**	.01
No hope	Serious	.15	.28	.01	.00	-.11	.11	**.72**	.04
Community service is necessary	Serious	.41	.42	-.08	.24	.23	.13	**.15**	.13
Crucial to solution to problems	Serious	.40	.42	-.06	.19	.15	.12	**.51**	.13
The more who help	Actions	.26	.25	.03	.35	.18	.10	**.55**	.11
Contacts for my professional career	Benefits	.15	.17	-.13	.06	.13	.14	.10	**.77**
Valuable experience for my resume	Benefits	.10	.08	-.06	.14	.03	.13	.03	**.86**

Note. NOR = Normative helping attitudes, CON = Connectedness, COS = Costs, AWA = Awareness, INT = Intentions, BEN = Benefits, SER = Seriousness, CAR = Career benefits.

Table 5

Principal Components Scale Correlations , Coefficient Alphas, Means, and Standard Deviations

Scale	M	SD	NOR	CON	COS	AWA	INT	BEN	SER	CAR
NOR [a]	5.77	.78	.92							
CON [a]	5.10	1.11	.74***	.93						
COS [b]	4.46	1.26	-.16**	-.20***	.85					
AWA [a]	5.95	.77	.70***	.67***	-.11	.85				
INT [a]	5.07	1.45	.55***	.58***	-.30***	.42***	.86			
BEN [b]	5.81	.84	.59***	.50***	-.16**	.50***	.40***	.79		
SER [a]	4.89	1.05	.71***	.77***	-.09	.64***	.46***	.47***	.84	
CAR [b]	5.39	1.17	.38***	.37***	-.18**	.30***	.28***	.47***	.31***	.72

Note. Reliabilities appear on the diagonal. NOR = Normative helping attitudes, CON = Connectedness, COS = Costs, AWA = Awareness, INT = Intentions, BEN = Benefits, SER = Seriousness, CAR = Career benefits.

[a] Item responses were on a 7-point Likert-type scale: 1 = strongly disagree, 7 = strongly agree

[b] Item responses were on a 7-point Likert-type scale: 1 = extremely unlikely, 7 = extremely likely

* $p<.05$ ** $p<.01$ *** $p<.001$

Table 6

Principal Components Scales Correlations with Demographic Variables

Scale	Age	Gender	Race	College Rank	Major	Previous C. S. Experience	Previous C. S. Frequency
NOR	.08	.31***	.06	.08	-.16**	.15**	.26***
CON	.10	.26***	.06	.01	-.20***	.13*	.26***
COS	.04	-.17**	-.06	.06	.15**	-.13*	-.14*
AWA	.10	.31***	.06	.09	-.12*	.08	.16**
INT	.03	.27***	.05	.05	-.23***	.35***	.44***
BEN	.11*	.28***	.06	.14*	-.19***	.06	.15*
SER	.11*	.27***	.11	.05	-.12*	.07*	.15*
CAR	-.07	.22***	.02	.05*	-.10	.04	.03

Note. C. S. is community service. Race is coded 1=minority, 2=white, non-Hispanic. Major is coded 1=Business, 2 = non-business. NOR = Normative helping attitudes, CON = Connectedness, COS = Costs, AWA = Awareness, INT = Intentions, BEN = Benefits, SER = Seriousness, CAR = Career benefits.

* $p<.05$ ** $p<.01$ *** $p<.001$

45

Table 7

Scale Means by Major and One-way Anovas

	Major							One-way anovas				
Scale	SW	PSY	SC	ED	REC	BUS	Other		MSE	DF	F	R^2
NOR [a]	6.42	5.96	5.75	5.70	5.64	5.56	5.93	Main effects	1.806	6	3.075	.06**
								Total	.611	313		
CON [a]	5.83	5.35	5.25	5.23	5.06	4.78	5.23	Main effects	3.107	6	2.617	.05*
								Total	1.224	313		
COS [b]	4.20	4.27	4.77	4.46	4.44	4.76	4.12	Main effects	3.587	6	2.226	.04*
								Total	1.65	313		
AWA [a]	6.54	6.20	5.88	5.89	5.88	5.83	5.95	Main effects	1.29	6	2.208	.04*
								Total	.597	313		
INT [a]	6.27	5.54	4.85	5.28	4.99	4.59	5.31	Main effects	8.291	6	4.277	.08***
								Total	2.06	313		
BEN [b]	6.40	6.07	5.89	5.96	5.74	5.63	5.75	Main effects	1.802	6	2.745	.05*
								Total	.678	320		
SER [a]	5.56	5.02	5.03	4.69	5.02	4.69	4.90	Main effects	1.589	6	1.443	.03
								Total	1.11	320		

CAR [b]	6.20	5.61	5.39	5.82	5.19	5.28	5.30	Main effects	2.285	6	1.732	.03
								Total	1.338	320		

Note. SW = Social Work, PSY = Psychology, SC = Speech Communication, ED = Education, REC = Recreation and Tourism, BUS = Business. NOR = Normative helping attitudes, CON = Connectedness, COS = Costs, AWA = Awareness, INT = Intentions, BEN = Benefits, SER = Seriousness, CAR = Career benefits.

[a] Item responses were on a 7-point Likert-type scale: 1 = strongly disagree, 7 = strongly agree

[b] Item responses were on a 7-point Likert-type scale: 1 = extremely unlikely, 7 = extremely likely